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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,924	03/26/2004	Toni Kopra	872.0180.U1(US)	9401

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HARRINGTON & SMITH, PC
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER	
SAMS, MATTHEW C	

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2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/810,924	KOPRA ET AL.	
	Examiner	Art Unit	
	Matthew C. Sams	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,12,16-20,22-27,30,35,37,38,40 and 47-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,12,16-20,22-27,30,35,37,38,40 and 47-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/5/2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-9, 12, 16-20, 22-27, 30, 35, 37, 38, 40 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US-6,990,453 hereinafter, Wang) in view of Barton et al. (US 2002/0072982 hereinafter, Barton) and Vetro et al. (US-6,490,320 hereinafter, Vetro).

Regarding claim 1, Wang teaches a mobile station (Col. 7 line 67 through Col. 8 line 5) comprising:

an interface to receive a media sample; (Fig. 1 [12] and Col. 5 line 36 through Col. 6 line 15)

a processor to extract a first set of features from a digital version of the media sample; (Col. 6 lines 14-34 and Fig. 1 [14])

a transmitter to transmit the extracted first set of features over a wireless communication link; (Col. 6 line 61 through Col. 7 line 11 and Col. 8 lines 5-24)

and inherently includes a receiver for receiving information over a wireless communication link. (Col. 7 line 67 through Col. 8 line 5 "mobile phone")

Wang differs from the claimed invention by not explicitly reciting the receiver is for receiving a request message over the wireless link that requests additional features and the processor is automatically responsive to the request message to extract a second set of features from the digital version of the media sample and the transmitter is further to transmit the extracted second set.

In an analogous art, Barton teaches a system for identifying audio samples that includes a recursive feature for automatically requesting more information in order to narrow the search results to find the corresponding file. (Page 5 [0048 and 0049] the "resolution of the derivation is coupled, in large measure, to the level of discrimination required in selecting an event to be triggered. As the number of potentially triggered events increases, the necessity to resolve ambiguity in the sample also increases", Page 6 [0059] "the song excerpt may be increased in length, or a different excerpt may be furnished, in an iterative manner" until a song is identified and Page 7 [0067-0068]) At the time the invention was made, it would have been obvious to one of ordinary skill

in the art to implement the mobile station of Wang after modifying it to incorporate the ability to increase resolution to resolve ambiguity of Barton. One of ordinary skill in the art would have been motivated to do this since it enables back and forth communication to resolve ambiguity. (Page 5 [0048-0049], Page 6 [0059] and Page 7 [0067-0068])

Wang in view of Barton teaches requesting at least one additional feature (Barton Page 5 [0048 and 0049] the "resolution of the derivation is coupled, in large measure, to the level of discrimination required in selecting an event to be triggered. As the number of potentially triggered events increases, the necessity to resolve ambiguity in the sample also increases", Page 6 [0059] "the song excerpt may be increased in length, or a different excerpt may be furnished, in an iterative manner" until a song is identified and Page 7 [0067-0068]), but differs from the claimed invention by not explicitly reciting that at least one additional feature that is a higher order extraction not directly extracted from the media sample itself.

In an analogous art, Vetro teaches an adaptable bitstream video delivery system for MPEG-7 applications that includes generating low-level meta data for describing a file (Col. 4 lines 35-37) and high level description schemes that combine several low-level descriptors (Col. 4 lines 44-46) but do not describe how to generate the content. (Col. 22 lines 30-33 *i.e.* the descriptors describe a file and a description scheme is made up of several descriptors, but is not extracted directly from the media sample) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the mobile station of Wang in view of Barton after modifying it to incorporate the high level description schemes of Vetro in order to better describe the

content within the file in order to simplify searches. (Col. 4 line 64 through Col. 5 line 6) One of ordinary skill in the art would have been motivated to do this since knowing the content of the file enables efficient distribution of the content on a network.

Regarding claim 2, Wang in view of Barton and Vetro teaches the interface comprises a transducer. (Wang Col. 7 line 67 through Col. 8 line 5)

Regarding claim 3, Wang in view of Barton and Vetro teaches the transducer comprises a microphone and the media sample comprises an audio sample. (Wang Col. 5 lines 36-59, Col. 7 line 67 through Col. 8 line 5, Fig. 1 [12] and Col. 15 lines 25-58)

Regarding claim 4, Wang in view of Barton and Vetro teaches the transducer comprises a camera and the media sample comprises a visual sample. (Wang Col. 5 lines 36-59)

Regarding claim 5, Wang in view of Barton and Vetro obviously teaches the interface comprises one of a cable and a wireless link. (Wang Col. 7 line 67 through Col. 8 line 5 and Col. 15 lines 25-58)

Regarding claim 6, Wang in view of Barton and Vetro teaches the media sample that the interface receives is the digital version. (Wang Col. 15 lines 25-58)

Regarding claim 7, Wang in view of Barton and Vetro teaches the transmitter is further configured to transmit a message that includes the at least one extracted feature and no portion of the digital version of the media sample. (Wang Col. 4 lines 23-32 [LPC coefficients and frequency components of spectrogram peaks])

Regarding claim 8, Wang in view of Barton and Vetro teaches the processor is further configured to adaptively select a number of features to extract based on the digital version of the media sample. (Wang Col. 4 lines 23-32 [LPC coefficients and frequency components of spectrogram peaks])

Regarding claim 9, Wang in view of Barton and Vetro teaches the processor is further configured to adaptively select at least one type of feature to extract based on the digital version of the media sample, the processor extracts at least one feature of the adaptively selected type, and wherein the transmitter is further configured to transmit an identifier of the selected type of feature. (Wang 4 lines 15-41 and Col. 7 line 3 through Col. 8 line 24)

Regarding 12, Wang in view of Barton and Vetro teaches a user interface for causing the transmitter to transmit the first set of features, and a buffer to store at least a portion of the digital version of the media sample, wherein the processor extracts at least some of the first set prior to a user input at the said user interface. (Wang Col. 21 line 57 through Col. 22 line 50)

Regarding claim 16, Wang in view of Barton and Vetro teaches a user interface (Wang Col. 5 lines 36-59 and Col. 7 line 67 through Col. 8 line 24) by which a single user input initiates:

the processor to extract the first set of features, a wireless communications link to be established between the MS and a communication service, and the extracted first set of features to be transmitted over the wireless communications link. (Wang Col. 6 line 61 through Col. 7 line 36 and Col. 7 line 67 through Col. 8 line 24)

Regarding claim 17, Wang in view of Barton and Vetro teaches the single user input further initiates a buffer disposed between the transducer and the processor to begin storing at least a portion of the digital version of the media sample. (Wang Col. 15 line 25 through Col. 16 line 2)

Regarding claim 18, Wang in view of Barton and Vetro teaches extracting MPEG-7 descriptors from the digital version of the media sample. (Vetro Col. 21 lines 57-67 and Col. 22 lines 14-33)

Regarding claim 19, Wang in view of Barton and Vetro teaches the processor extracts MPEG-7 file information that is non-reconstructive of the digital version of the media sample. (Vetro Col. 4 line 64 through Col. 5 line 6 & Col. 22 lines 30-33)

Regarding claim 20, Wang in view of Barton and Vetro teaches the extracted features (Vetro Col. 4 line 64 through Col. 5 line 6 & Col. 22 lines 30-33) for which the transmitter is to transmit are non-reconstructive of the digital version of the media sample. (Vetro Col. 4 line 64 through Col. 5 line 6 & Col. 22 lines 30-33)

Regarding claim 22, Wang in view of Barton and Vetro teaches the request message specifically identifies each additional feature at least by type and the second set of features comprises only features of the said identified type. (Wang Col. 15 line 59 through Col. 16 line 2)

Regarding claim 23, Wang in view of Barton and Vetro teaches a computer program, embodied on a computer readable medium within a mobile station (Wang Col. 7 line 67 through Col. 8 line 24), to process a media sample comprising:

a first set of computer instructions to extract in response to a user input, a first set of features from a digital media sample (Wang Col. 6 lines 14-34 and Fig. 1 [14]), and to extract in response to a received request message a second set of features consistent with additional features that are requested in the request message; (Barton Page 5 [0048 and 0049] the "resolution of the derivation is coupled, in large measure, to the level of discrimination required in selecting an event to be triggered. As the number of potentially triggered events increases, the necessity to resolve ambiguity in the sample also increases", Page 6 [0059] "the song excerpt may be increased in length, or a different excerpt may be furnished, in an iterative manner" until a song is identified and Page 7 [0067-0068]) wherein the at least one additional feature is a higher order extraction not directly extracted from the media sample itself; (Vetro Col. 4 lines 44-46 & Col. 22 lines 30-33) and

a second set of computer instructions to transmit in separate messages (Wang Col. 7 lines 3-11 and Col. 8 lines 16-21) the first and second sets of extracted features over a wireless communication link. (Wang Col. 7 line 67 through Col. 8 line 24)

Regarding claim 24, the limitations of claim 24 are rejected as being the same reason set forth above in claim 7.

Regarding claim 25, the limitations of claim 25 are rejected as being the same reason set forth above in claim 8.

Regarding claim 26, the limitations of claim 26 are rejected as being the same reason set forth above in claim 9.

Regarding claim 27, Wang in view of Barton and Vetro teaches the ability to transmit extracted features and time-bounded segments. (Wang Col. 6 line 61 through Col. 7 line 11)

Regarding claim 30, Wang in view of Barton and Vetro teaches at least one feature defines a timepoint, the first set of computer instructions is to extract at least one timepoint from the digital media sample, and one of said messages comprises a timepoint, a spectral slice of the digital media sample and an identifier that links the spectral slice to the timepoint. (Wang Fig. 8A and Col. 6 line 35 through Col. 7 line 36, Col. 8 line 61 through Col. 9 line 32 and Col. 21 lines 13-29)

Regarding claim 35, the limitations of claim 35 are rejected as being the same reason set forth above in claim 19.

Regarding claim 37, Wang in view of Barton teaches a computer program embodied on a computer readable medium to uniquely match a plurality of extracted features to a feature set stored in a database comprising:

a first set of computer instructions to separately receive over a network a first and second message that includes first and second sets of received features (Wang Col. 7 lines 3-11 and Col. 7 line 67 through Col. 8 line 24), respectively;

a second set of computer instructions to search a database of feature sets for all matching sets that match the first set of received features and to determine a second set of at least one additional feature that distinguishes among each of the matching sets (Barton Page 5 [0048-0049]), wherein the at least one additional feature is a higher

order extraction not directly extracted from the media sample itself; (Vetro Col. 4 lines 44-46 & Col. 22 lines 30-33)

a third set of computer instructions to transmit over the network a request message that stipulates the second set of additional features; (Barton Page 5 [0048 and 0049] the "resolution of the derivation is coupled, in large measure, to the level of discrimination required in selecting an event to be triggered. As the number of potentially triggered events increases, the necessity to resolve ambiguity in the sample also increases", Page 6 [0059] "the song excerpt may be increased in length, or a different excerpt may be furnished, in an iterative manner" until a song is identified and Page 7 [0067-0068]) and

a fourth set of computer instructions to uniquely identify one feature set from among the matching sets using the second set of received features. (Barton Page 5 [0048-0051], Page 6 [0059], Page 7 [0067-0068] and Wang Col. 16 line 45 through Col. 17 line 39)

Regarding claim 38, Wang in view of Barton and Vetro teaches each feature set is associated with a media file title (Wang Fig. 8B), the computer program further comprising a fifth set of computer instructions to transmit, over the network to a sender of the message, a reply message that includes the media file title. (Wang Fig. 1 [22] and Col. 6 lines 35-60)

Regarding claim 40, Wang in view of Barton and Vetro teaches the fourth set of computer instructions further is to determine a link address for a media file uniquely associated with the uniquely identified feature set, and wherein the fifth set of computer

instructions is further to transmit the link address in the reply message. (Barton Page 2 [0022-0023])

Regarding claim 47, Wang in view of Barton and Vetro teaches the request message includes at least one of a number of additional features and a type of the at least one additional feature. (Wang Col. 12 line 38 through Col. 13 line 10 and Barton Page 5 [0048-0049])

Regarding claim 48, the limitations of claim 48 are rejected as being the same reasons set forth above in claim 23.

Regarding claim 49; Wang in view of Barton and Vetro teaches the means for receiving a media sample comprises a transducer, and the means for extracting comprises a digital processor. (Wang Col. 7 line 12 through Col. 8 line 5 and Col. 15 lines 53-55)

Regarding claim 50, the limitations of claim 50 are rejected as being the same reasons set forth above in claim 1.

Response to Arguments

4. Applicant's arguments with respect to claims 1-9, 12, 16-20, 22-27, 30, 35 37, 38, 40 and 47-50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS
12/27/2007

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER